

Claims

- [c1] 1. A method of managing tension and maintaining registration of a first web and at least one second web, the method comprising the steps of:
transporting the first and second webs toward a finishing apparatus;
comparing relative positions of registration marks on the first and second webs;
severing lengths of the second web in response to the relative positions of the registration marks;
individually aligning each of the lengths of the second web with the first web; and then
simultaneously performing a finishing operation on the first and second webs with the finishing apparatus.
- [c2] 2. The method according to claim 1, wherein the finishing operation performed by the finishing apparatus comprises a cutting operation in which the first and second webs are both cut.
- [c3] 3. The QuickMark 1QuickMark 1method according to claim 1, further comprising the step of folding the first web over the second web so as to secure the lengths of the second web within a fold of the first web after the in-

dividually aligning step and before the simultaneously performing step.

- [c4] 4. The method according to claim 1, wherein the comparing and severing steps comprise synchronizing the severing step with the registration marks on the first web, and synchronizing transporting of the second web with the severing step.
- [c5] 5. The method according to claim 1, wherein the method is performed on a plurality of second webs.
- [c6] 6. A method of managing tension and maintaining registration of print images on preprinted and rewound webs in a web finishing system, at least first and second webs of the preprinted and rewound webs having registration marks along lengths thereof that demarcate repeat lengths of the print images on the first and second webs, the method comprising the steps of:
transporting the first and second webs toward a finishing apparatus;
comparing relative positions of the registration marks of the first and second webs as the first and second webs are transported toward the finishing apparatus;
severing lengths of the print images of the second web in response to the relative positions of the registration marks;

individually aligning each of the lengths of the second web with the first web so that the print images of the first and second webs coincide; and then simultaneously performing a finishing operation on the first and second webs with the finishing apparatus.

[c7] 7. The method according to claim 6, wherein the finishing operation performed by the finishing apparatus comprises a cutting operation in which the first and second webs are both cut.

[c8] 8. The method according to claim 6, further comprising the step of folding the first web over the second web so as to secure the lengths of the second web within a fold of the first web after the individually aligning step and before the simultaneously performing step.

[c9] 9. The method according to claim 6, wherein the comparing and severing steps comprise synchronizing the severing step with the registration marks on the first web, and synchronizing transporting of the second web with the severing step.

[c10] 10. The method according to claim 6, wherein the method is performed on a plurality of second webs.

[c11] 11. A system for managing tension and maintaining registration of a first web and at least one second web, the

system comprising:

means for simultaneously performing a finishing operation on the first and second webs;

means for transporting the first and second webs toward the finishing apparatus;

means for comparing relative positions of registration marks on the first and second webs;

means for severing lengths of the second web in response to the relative positions of the registration marks; and

means for individually aligning each of the lengths of the second web with the first web before the first and second webs encounter the performing means.

[c12] 12. The system according to claim 11, wherein the performing means is a cutting apparatus adapted to simultaneously cut the first and second webs.

[c13] 13. The system according to claim 11, further comprising means for folding the first web over the second web so as to secure the lengths of the second web within a fold of the first web before encountering the performing means.

[c14] 14. The system according to claim 11, wherein the comparing and severing means comprise means for synchronizing the severing means with the registration marks on

the first web, and means for synchronizing the transporting means with the severing means.

[c15] 15. The system according to claim 11, wherein the system is an offline web finishing system.

[c16] 16. A system of managing tension and maintaining registration of print images on preprinted and rewound webs in a web finishing system, the system comprising:
at least first and second webs having registration marks along lengths thereof that demarcate repeat lengths of the print images on the first and second webs;
a finishing apparatus for simultaneously performing a finishing operation on the first and second webs;
means for transporting the first and second webs toward the finishing apparatus;
means for comparing relative positions of the registration marks of the first and second webs as the first and second webs are transported toward the finishing apparatus;
means for severing lengths of the print images of the second web in response to the relative positions of the registration marks; and
means for individually aligning each of the lengths of the second web with the first web so that the print images of the first and second webs coincide.

- [c17] 17. The system according to claim 16, wherein the finishing apparatus is a cutting apparatus adapted to simultaneously cut the first and second webs.
- [c18] 18. The system according to claim 16, further comprising means for folding the first web over the second web so as to secure the lengths of the second web within a fold of the first web before encountering the finishing apparatus.
- [c19] 19. The system according to claim 16, wherein the comparing and severing means comprise means for synchronizing the severing means with the registration marks on the first web, and means for synchronizing the transporting means with the severing means.
- [c20] 20. The system according to claim 16, wherein the system is an offline web finishing system.